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[54] **POROUS PELLET ADSORBENTS  
FABRICATED FROM NANOCRYSTALS**[75] Inventors: Kenneth J. Klabunde; Olga Koper;  
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30, 1998, abandoned.[51] Int. Cl.<sup>7</sup> ..... D01D 59/26[52] U.S. Cl. .... 95/128; 95/133; 95/135;  
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335, 336, 338, 337, 340, 343, 345, 350;  
264/109, 319, DIG. 25; 423/604, 605, 608,  
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**ABSTRACT**

Pelletized adsorbent compositions and methods of adsorbing toxic target compounds are provided for the destructive adsorption or chemisorption of toxic or undesired compounds. The pelletized adsorbents are formed by pressing together powder nanocrystalline particles comprising a metal hydroxide or a metal oxide at pressures of from about 50 psi to about 6000 psi to form discrete self-sustaining bodies. The pelletized bodies should retain at least about 25% of the surface area/unit mass and total pore volume of the starting metal particles.

**13 Claims, 8 Drawing Sheets**